Stream Line

City of Indianapolis / Department of Public Works / Clean Stream Program

Fall 2004

Inside This Issue

Statement Of Purpose

The Indianapolis Clean Stream Team is overseeing many projects to keep raw sewage out of our waterways and improve the quality of life in our neighborhoods. Stream Line is published quarterly to keep you informed about the city's progress in reducing raw sewage overflows and restoring the health of our streams.

Contact Info

Send letters to:
Indianapolis Clean Stream Team
Attn: Jodi Perras
151 N. Delaware St.
Suite 900
Indianapolis, IN 46204

Tel: 317-327-8720
Fax: 317-327-8699
Email: jperras@indygov.org

INDIANAPOLIS
CLEAN STREAM TEAM

Sewer Overflow Hotline: 327-1643

REDUCING SEWAGE OVERFLOWS: YOUR INPUT NEEDED

Greetings,

The City of Indianapolis is finalizing a plan to reduce raw sewage overflows into our rivers and streams, and we need your input.

In 2001, we proposed a plan to add capacity to our 100-year-old sewer system. Since then, we have been negotiating with regulatory agencies while also implementing many short-term projects to clean our streams. In the coming months, we hope to finalize a long-term plan and gain state and federal approval to move ahead with more projects.

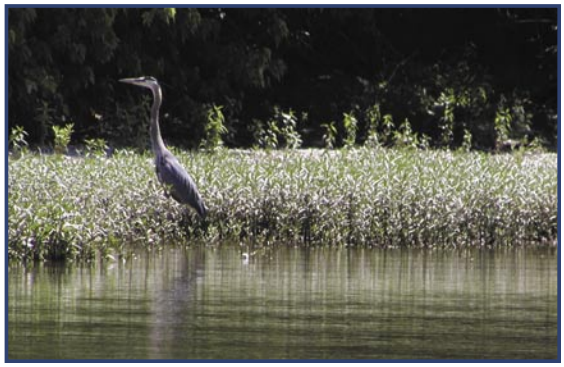
You can participate in developing the plan by:

- Reviewing the information in this newsletter and returning the response card, by October 30
- Attending one of our public meetings (see the schedule below), or
- Visiting our Web site at *www.indycleanstreams.org* between October 14-30.

As you may know, this is not the only financial challenge facing our community. Recently, I proposed "Indianapolis Works," a plan to simplify and streamline local government and tax structures in Indianapolis and Marion County to make our community even more competitive with other cities and even more attractive to families, homeowners, businesses, and entrepreneurs.

Reducing the hazards, smells and sight of raw sewage in our neighborhoods is another challenge we must face to avoid costly fines and remain a vital, growing community.

Thank you for taking time to learn about these issues. Your opinion matters to me.



Sincerely,

Bart Peterson

Bart Peterson

PUBLIC MEETING SCHEDULE

Thursday, October 14	Garfield Park Multipurpose Room	2450 S. Shelby St.	7:00 PM
Tuesday, October 19	Julia Carson Government Center, Rm A	300 E. Fall Creek Parkway, N. Drive	7:00 PM
Thursday, October 21	Christamore House Auditorium	502 N. Tremont	6:00 PM
Monday, October 25	Brookside Park Auditorium	3500 Brookside Parkway S. Drive	7:00 PM
Tuesday, October 26	Riviera Club	5640 N. Illinois Street	7:00 PM

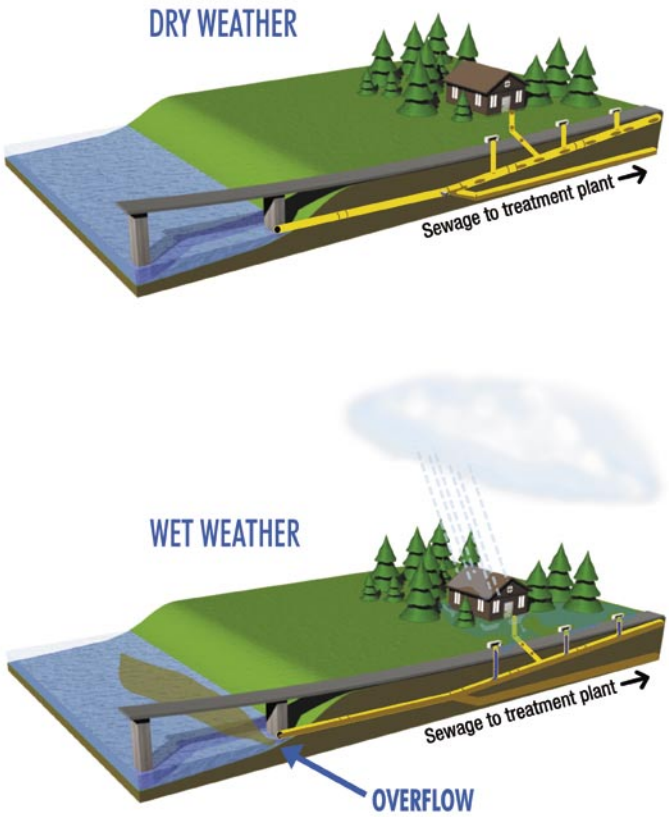
The City of Indianapolis will host five public meetings to provide more information on the options. These meetings give the public an opportunity to provide feedback before the city decides on the long-term plan. The final plan will be subject to the approval of the U.S. Environmental Protection Agency and the Indiana Department of Environmental Management.

Find us on the web at: www.indycleanstreams.org

WHY DO OUR SEWERS OVERFLOW WHEN IT RAINS?

More than 100 years ago, Indianapolis built a storm sewer system to carry rainwater and melting snow away from homes, businesses and streets. When indoor plumbing came later, homeowners and business owners hooked their sewage lines to these storm sewers, combining stormwater and raw sewage into one pipe. This was common practice in many U.S. cities, especially in the Northeast and Midwest.

During dry weather, a combined sewer system works much like a separate sewer—carrying all sewage to the treatment plant for treatment. However, when it rains or snow melts, the sewer can be overloaded with incoming stormwater. When this happens, the sewers are designed to flow over internal dams in the underground pipe system and into nearby streams and rivers. Without these overflows, sewage would back up into basements and streets. Today, when building new sewer systems, we build separate sewers for stormwater and sewage.

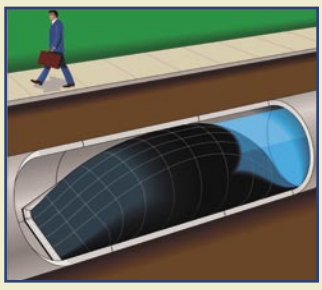


PROJECTS ALREADY UNDERWAY

Many projects have already begun to repair old sewer lines, build new storage tanks and expand treatment plants. Together, these "early action projects" will remove more than 2 billion gallons of overflows from our waterways each year.

At the same time, the City of Indianapolis has been working with the U.S. Environmental Protection Agency and the state to develop a long-term control plan that will provide a roadmap for future sewer repair and solutions to Indianapolis' raw sewage overflow problems.

Some of the early action projects include:



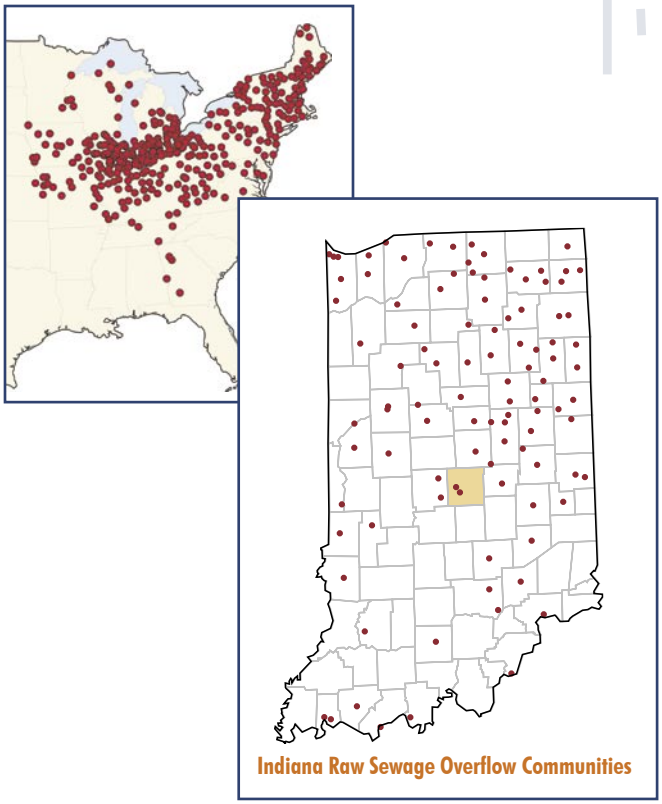
Inflatable Dams

Inflatable dams have been constructed to keep millions of gallons of sewage out of Pleasant Run near Ellenberger Park and Howe Middle School and Pogues Run at Brookside Park.

When stormwater enters the sewers, the dams will inflate to block the overflow pipe and direct the wastewater to the city's treatment plants. After the storm, when the flows in the sewer recede, the dam will deflate. Inflatable dams help save money by using existing sewer lines to contain and reduce raw sewage overflows.

Electronic sensors upstream and downstream of the dam will send data to a centralized computer, which will activate the dam as needed. These projects are part of a $5.6 million effort to install automated sewage control technologies in locations throughout the city.

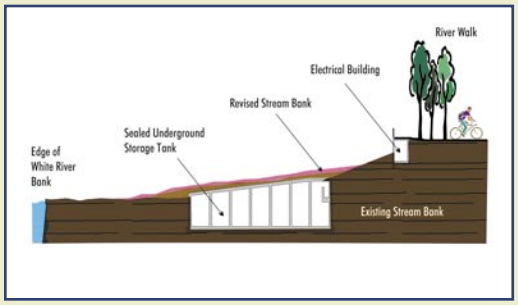
HOW BIG IS THIS PROBLEM?



Indiana Raw Sewage Overflow Communities

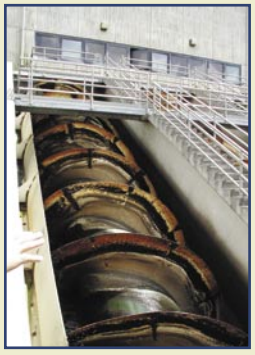
Many cities with combined sewer systems have problems with raw sewage overflows when it rains. These overflows contain not only stormwater, but also untreated human and industrial waste, toxic materials and debris. Combined sewer systems serve roughly 772 communities containing about 40 million people, according to the U.S. Environmental Protection Agency. Most communities with combined sewer systems are located in the Northeast and Great Lakes regions and in the Pacific Northwest. Indiana has 105 communities with combined sewers.

Raw sewage in our streams is a health hazard, smells and looks disgusting, hurts our environment and harms the quality of life in our neighborhoods. Sewage overflows are a major cause of pollution in White River, Fall Creek, Pleasant Run, Pogues Run and Eagle Creek. Raw sewage steals oxygen from the water, making it difficult for fish to breathe and sometimes causing fish kills. High bacteria levels make streams unsafe for children to wade or play in the water. Raw sewage in our streams also prevents us from becoming a world-class city that can attract new businesses, jobs and residents.



White River East Bank Storage Tank

A 3-million gallon underground storage tank was installed this year along the White River near the Indiana University-Purdue University Indianapolis campus. The tank will capture and store a combination of raw sewage and stormwater that would otherwise overflow into the river during storms. It will hold the wastewater until flows in the sewer system subside. The tank will control one of the largest sources of raw sewage overflow in the city.



BEFORE

AFTER

Improvements at the Treatment Plants

Early action projects and other improvements at the city's two wastewater treatment plants will reduce plant overflows by millions of gallons each year. Some sewage overflows currently go directly into the White River and Little Buck Creek.

The wet weather upgrades at the Belmont Advanced Wastewater Treatment Plant include two double-lined flow equalization basins and two concrete storage tanks that also provide first-stage treatment. At the Southport Advanced Wastewater Treatment Plant, the city is building a new pump station, new 48-inch force mains to convey flows, and a double-lined equalization basin for storage and later treatment.

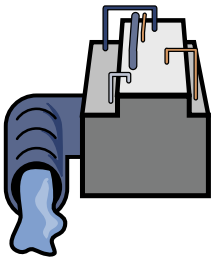
In the next few years, the city also will install new wet weather treatment facilities at Belmont and a new pipeline between the plants so Southport can treat more flows when Belmont is overloaded by wet weather.

OVERVIEW OF OPTIONS

The city has evaluated a number of technologies and options to further reduce sewage overflows to our streams. The final options are:

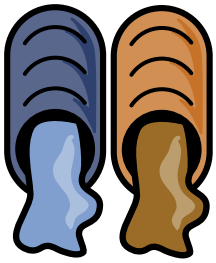
PLAN 1: STORAGE AND CONVEYANCE

Plan 1 would involve a single deep tunnel, underground storage tanks and new sewers to capture raw sewage that would otherwise overflow into our streams. The tunnels and tanks would store the sewage underground until after a storm, when the captured sewage would be pumped to the city's treatment plants. The treatment plants also would be expanded. Total costs range from $1.44 billion to $3.02 billion, depending on the size of the facilities.



PLAN 2: STORAGE AND REMOTE TREATMENT

Plan 2 would involve three deep tunnels, as well as underground storage tanks and new sewers to capture raw sewage that would otherwise overflow into our streams. It also would include remote treatment facilities at the downstream end of Pogues Run and Fall Creek tunnels. These treatment facilities would treat wet-weather flows that exceed the tunnels' capacity. The city's central treatment plants also would be expanded. Total costs range from $1.55 billion to $3.03 billion, depending on the size of the facilities.



PLAN 3: TOTAL SEWER SEPARATION

Plan 3 would involve completely separating combined sewers in all areas to eliminate raw sewage overflows. Existing combined sewers would be converted to either a separate sanitary sewer or a separate storm sewer. New sewers would need to be installed in all neighborhoods, and all homes and businesses would be re-connected to the separated sewers. The city's treatment plants would not be expanded under this plan. Total sewer separation is the most costly option, estimated at $6.2 billion.

OTHER WATERSHED IMPROVEMENTS

A watershed is an area of land that drains into a river or stream. The city is looking at all the sources of pollution in its watersheds to identify the best plan for improving water quality. Under all three plans, the city also would implement the following programs:

- Building sewers for neighborhoods now served by septic systems
- Implementing projects to reduce flooding and improve stormwater drainage
- Restoring streambanks and removing polluted sediments from streams
- Disconnecting downspouts, sump pumps and other illicit connections that take up sewer capacity

If Plan 1 or 2 are chosen, these additional improvements would be added:

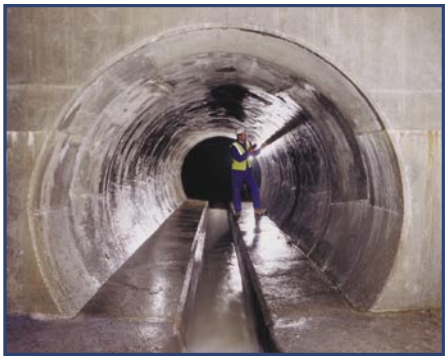
- Adding water to tributaries to improve stream flow and wildlife habitat
- Improving oxygen levels in streams by adding aeration on Fall Creek and White River, removing Boulevard Dam on Fall Creek and modifying Stout Dam on White River

The cost of these additional programs is estimated at $64.72 million (included in cost estimates above).

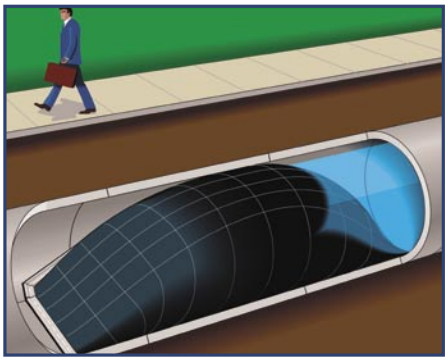
PLAN 1: STORAGE AND CONVEYANCE

The key features of Plan 1 are:

- A single central tunnel system along Fall Creek and White River, to store and carry sewage to the city's wastewater treatment plants. The tunnel would be built several hundred feet below the ground surface with tunnel boring machines. Tunnels can provide a large storage volume with very little disturbance to the ground surface, making them a preferred option in urban areas. Sewage storage tunnels have been built in Chicago, Milwaukee, Toledo and other cities.
- New, larger sewers along Pogues Run, Pleasant Run, Bean Creek and parts of Fall Creek and White River to capture overflows and carry them to the central tunnel system. Most sewers would be installed by digging open trenches, with limited sections installed by small-scale tunneling.
- A new sewer along Eagle Creek to carry wet weather flows to the Belmont Advanced Wastewater Treatment Plant.
- An underground storage tank near Spades Park to capture and store overflows from upper Pogues Run. The stored sewage would be pumped to the city's treatment plants after a storm. The storage tank would be self-cleaning.
- Upgrading an existing storage/treatment facility at Riviera Club to capture, store and treat overflows from upper White River.
- An underground storage tank now under construction on the White River near the campus of Indiana University-Purdue University at Indianapolis. Stored sewage would be pumped to the treatment plants after a storm, and the tank would have an automatic self-cleaning system.
- Inflatable dams and pinch valves at key points in the sewer system. These devices help save money by using existing sewer lines to contain and reduce raw sewage overflows. Eventually, electronic sensors would send data to a centralized computer, allowing remote and real-time control of flows within the sewer system.
- Local sewer separation projects to eliminate isolated overflows on State Ditch, Lick Creek and the upstream ends of Fall Creek, Pogues Run and Bean Creek.
- Improvements to both Belmont and Southport Advanced Wastewater Treatment Plants to increase their ability to store and treat peak flows during wet weather. Improvements would include a new sewer pipe connecting the two plants.
- Watershed improvements described on page 4.



Storage tunnel

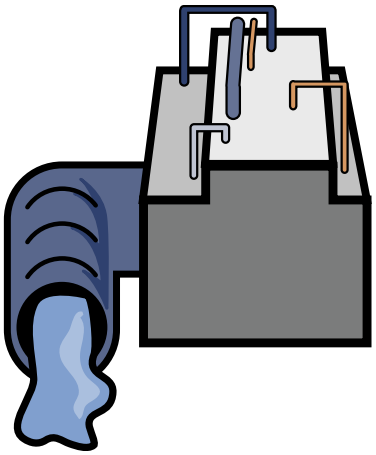


Inflatable dam

Plan 1 costs

The key factor in determining cost is facility size. The larger you build a tunnel, storage tank, or other facility, the more it will capture and the more it will cost. The city's options under Plan 1 could increase sewage capture from today's 63 percent annual average to 90, 93, 95, 97 or 99 percent. Design, construction and 20 years of operating costs for Plan 1 range from $1.443 billion for 90 percent capture to $3.026 billion for 99 percent capture.

PLAN 2: STORAGE AND REMOTE TREATMENT



Plan 2 is similar to Plan 1 in many respects. The key differences are three separate tunnels and the use of high-rate treatment facilities along Fall Creek and Pogues Run to treat sewage captured by deep tunnels, rather than send it to the city's existing treatment plants.

The key features of Plan 2 are:

- Two separate deep tunnel systems and treatment facilities – one for Fall Creek and one for Pogues Run. The treatment facilities would be located at the downstream end of both waterways, where they converge with the White River. These facilities would use the latest technologies to treat sewage stored in the tunnels, discharging treated flows into the streams after disinfection with ultraviolet lights. These treatment units would be relatively small and could start up quickly to treat storm flows. However, they would not be as effective as the city's advanced wastewater treatment plants in removing pollutants, and they would require more maintenance than a storage tank or tunnel.
- A third separate tunnel system for White River watershed with a pumping facility to direct stored sewage to the city's central treatment plants.
- New sewers for isolated outfalls along Fall Creek, Pogues Run and White River to carry wet weather flows into each tunnel system.

Remote treatment unit

Remote treatment

The remaining features of Plan 2 are identical to Plan 1:

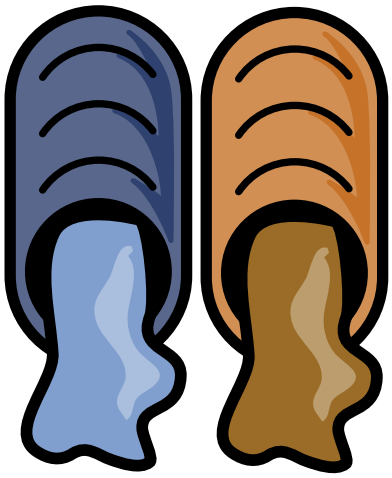
- New, larger sewers along Eagle Creek, Pleasant Run and Bean Creek.
- An underground storage tank for upper Pogues Run near Spades Park.
- Upgrading an existing storage/treatment facility for upper White River at Riviera Club.
- An underground storage tank now under construction on the White River near the IUPUI campus.
- Inflatable dams and pinch valves at key points in the sewer system.
- Local sewer separation projects to eliminate isolated overflows on State Ditch, Lick Creek and the upstream ends of Fall Creek, Pogues Run and Bean Creek.
- Improvements to both Belmont and Southport Advanced Wastewater Treatment Plants, including a new sewer pipe connecting the two plants.
- Watershed improvements described on page 4.

Plan 2 costs

As with Plan 1, the key factor in determining cost is facility size. Building and operating the remote treatment facilities makes Plan 2 somewhat more expensive than Plan 1. Design, construction and 20 years of operating costs for Plan 2 range from $1.545 billion for 90 percent capture to $3.032 billion for 99 percent capture.

PLAN 3: TOTAL SEWER SEPARATION

Plan 3 includes total separation of existing combined sewers in all watersheds to eliminate all combined sewer outfalls. Total sewer separation is the most costly option and would also be the most disruptive to neighborhoods during construction, especially downtown and in Center Township. Sewer separation would lead to increased pollution from urban stormwater, a significant source of water quality problems in Marion County.



The key features of Plan 3 are:

- Total sewer separation in all watersheds, including Fall Creek, Pogues Run, Pleasant Run, Eagle Creek, State Ditch and White River. The existing combined sewers would be converted to either a separate sanitary sewer or a separate storm sewer.
- Stormwater flows would be conveyed to ponds, sand filters or other stormwater management practices, prior to discharge into streams. These technologies would help reduce (but not eliminate) the many pollutants found in urban stormwater, such as sediments, organic matter, metals, oils, and trash.
- Improvements to the Belmont and Southport treatment facilities would not be needed, nor would the new pipe connecting the two plants.
- Watershed improvements described on page 4.

Plan 3 costs

The cost of sewer separation was estimated based upon the total acreage that would need to be separated. With 35,405 acres draining into the combined sewer area, the city estimates the total cost of sewer separation at $6.201 billion.

Sewer separation under construction

Sewer separation under construction

NEIGHBORHOOD IMPACTS

Like any construction project, all the plans will affect our neighborhoods. Some will have greater impact during construction, while others might have more of an effect during long-term operation. The Mayor's Raw Sewage Overflow Advisory Committee and the Wet Weather Technical Advisory Committee—made up of neighborhood representatives, health officials, environmental advocates and technical representatives—evaluated how the three plans would impact neighborhoods.

Here's a sample of some of the questions committee members asked when they considered how the plans would affect neighborhoods:

- **NOISE:** How much and when will noise occur during construction? How much noise will be present in the long-term, from pumps and blowers, etc.?
- **ODOR:** Are odors expected to be increased during the long-term operation?
- **SAFETY AND SECURITY:** Are there public safety issues associated with the alternative, such as use of chemicals for treatment, creation of mosquito or fly habitat? Are there security issues, such as potential for vandalism, terrorism, sabotage, etc.?
- **SITING CONCERNS:** How close are facilities to homes, parks and schools? How difficult would it be to site these facilities?
- **AESTHETICS:** How long will the facilities have a visual impact on the existing landscape? Can the alternative be seen from a home or public gathering place, such as a park?
- **TRUCK TRAFFIC DURING OPERATION:** How frequently will trucks travel through a neighborhood for regular operation and maintenance activities?
- **NEIGHBORHOOD DISRUPTION DURING CONSTRUCTION:** How much disruption will be caused to streets, sidewalks, parks, yards, etc. during construction? How long will the disruption last?

Committee members and city staff reviewed these questions and then ranked the proposed plans 1st, 2nd or 3rd, based on their judgment. They concluded that Plan 1 is the best option for neighborhood issues, followed by Plan 3, and Plan 2. The final results are in the graphic below.

	PLAN 1	PLAN 2	PLAN 3
NOISE	1st	3rd	1st
ODOR	2nd	3rd	1st
SAFETY AND SECURITY	1st	3rd	1st
SITING CONCERNS	1st	2nd	2nd
AESTHETICS	1st	3rd	2nd
TRUCK TRAFFIC DURING OPERATION	1st	3rd	2nd
NEIGHBORHOOD DISRUPTION DURING CONSTRUCTION	1st	2nd	3rd
THE COMMITTEE'S OVERALL RANKING OF NEIGHBORHOOD ISSUES	1st	3rd	2nd

***Please answer Question 1 on the Clean Stream Decision-Making Card.**

IMPACT ON SEWER RATES

One key factor in selecting a plan is determining its impact on ratepayers. Our sewer rates, which are among the lowest in the nation, will need to rise in order to pay for these projects. However, the city will work hard to keep construction costs down and obtain state and federal grants to reduce the burden on our ratepayers.

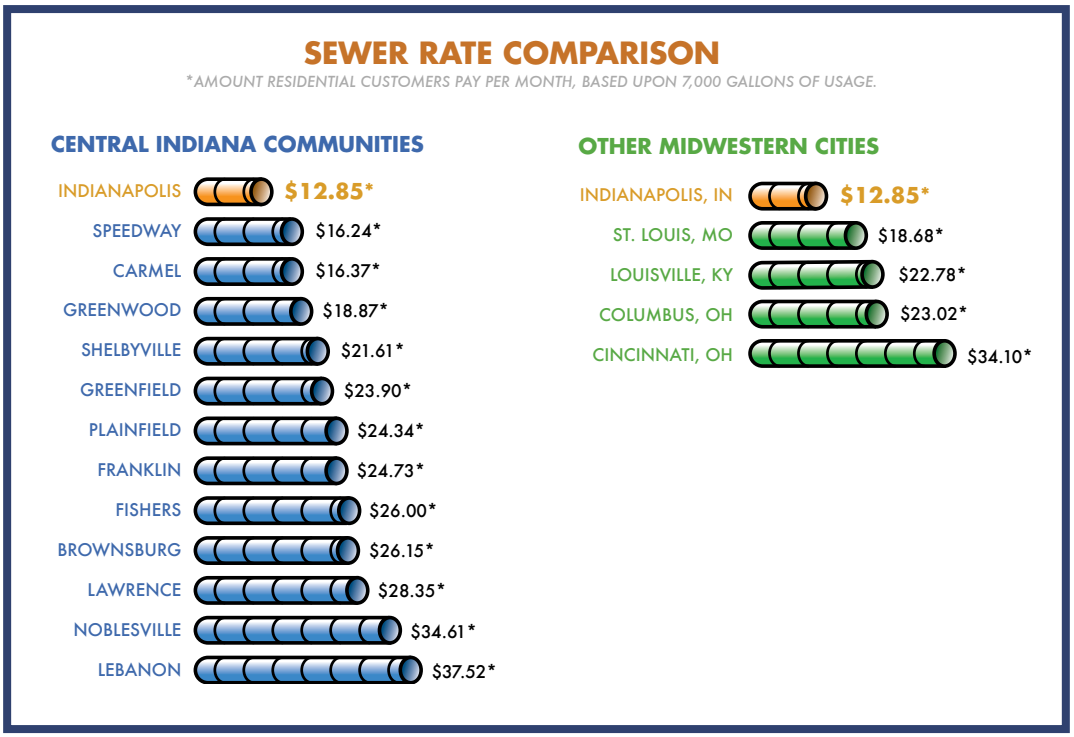
The city is concerned in particular about rate impacts on Center Township, where the city's most disadvantaged residents live. Forty-three percent of households in Center Township are considered "low income," as defined by the federal government – that is, they have less than 50 percent of the area median family income. For Marion County as a whole, 25 percent of households fit that description.

While long-term sewer rates are difficult to predict, the city has estimated the additional monthly cost to ratepayers for sewage overflow control at the end of 20 years. Rates will rise gradually during that time to provide funding necessary to repay bonds and loans used to finance the projects, as well as operate and maintain the new facilities.

Estimated impact on rates for the different options are shown in the comparison table on page 10. These rates only represent increases associated with controlling combined sewer overflows. Other rate increases will likely be needed to keep our sanitary sewers and treatment plants in good condition.

HOW DO OUR RATES COMPARE WITH OTHER CITIES?

Indianapolis sewer rates are low in comparison to other cities of our size and other cities in Indiana. Indianapolis residential customers pay $12.85 per month, based upon 7,000 gallons of usage. According to a rate survey conducted by the accounting firm Crowe Chizek in 2004, comparable rates in other cities for the same usage were:



MAKING THE COMPARISON

How do we decide what plan is best? In addition to looking at neighborhood issues, we can compare the plans based upon how well they reduce overflows, protect human health, protect wildlife, or manage costs. A side-by-side comparison of the various options is presented in the table below.

	REDUCING OVERFLOWS			PROTECTING HUMAN HEALTH		IMPROVING WILDLIFE HEALTH	MANAGING COSTS		
	AVERAGE % OF FLOW CAPTURED AND TREATED ANNUALLY	AVERAGE # OF UNTREATED OVERFLOWS PER YEAR	ADDITIONAL GALLONS OF SEWAGE CAPTURED/TREATED PER YEAR	DAYS WATERWAYS ARE SAFE FOR SWIMMING (<235 *E. COLI* COLONIES/100 ml)	DAYS WATERWAYS HAVE VERY HIGH BACTERIA LEVELS (> 10,000)	AQUATIC AND WILDLIFE BENEFITS	TOTAL COST (CONSTRUCTION + OPERATIONS FOR 20 YEARS)	TOTAL COST PER GALLON OF OVERFLOW CAPTURED	AVERAGE HOMEOWNER'S MONTHLY SEWER RATES (AT END OF 20 YEARS)*
CURRENT CONDITIONS	63%	60	-	187 days	52 days	3RD	$0	-	$12.85
PLAN 1	90%	12	6.33 billion	230 days	12 days	1ST	$1.44 billion	22.8 cents	$44.00
	93%	6	6.86 billion	230 days	6 days		$1.61 billion	23.5 cents	$47.00
	95%	4	7.12 billion	230 days	4 days		$1.73 billion	24.3 cents	$49.00
	97%	2	7.46 billion	230 days	2 days		$2.21 billion	29.6 cents	$58.00
	99%	0.5	7.73 billion	231 days	0.5 days		$3.03 billion	39.2 cents	$73.00
PLAN 2	90%	12	6.35 billion	230 days	12 days	2ND	$1.55 billion	24.4 cents	$46.00
	94%	6	6.93 billion	230 days	6 days		$1.72 billion	24.8 cents	$49.00
	95%	4	7.16 billion	230 days	4 days		$1.86 billion	26.0 cents	$51.00
	98%	2	7.49 billion	230 days	2 days		$2.23 billion	29.8 cents	$58.00
	99%	0.5	7.73 billion	231 days	0.5 days		$3.03 billion	39.2 cents	$73.00
PLAN 3	100%	0	7.87 billion	228 days	0 days	2ND	$6.2 billion	78.8 cents	$132.00

***Monthly sewer rate estimates include today's rates plus the amount needed to fund sewage overflow projects. Other rate increases will likely be needed in future years to keep the rest of our system in good condition.**

Reducing Overflows: Currently, sewers overflow about 60 times per year, spilling 7.87 billion gallons of untreated sewage into our waterways. The table shows how each plan will reduce the number of overflows each year and how many gallons will still overflow. After the plan is implemented, overflows would only happen during the biggest storms, or in back-to-back smaller storms. We will be capturing a greater percentage of sewage, up from 63 percent today to 90 percent or more under the various options.

Protecting Human Health: Will our waterways be safe for swimming? That goal is not achievable at all times. However, we will improve the number of days our waterways meet the state's swimming standards from 187 per year today to around 230 per year in the future. We will also reduce the number of days our streams have very high *E. coli* bacteria levels (greater than 10,000 colonies in a 100 milliliter sample). A city ordinance prohibits swimming in these streams. Even though water quality will improve under the city's plans, you should protect yourself and your family by staying out of urban waterways.

Improving Wildlife Health: Wildlife are already returning to city streams due to the investments the city has made in recent years. Each option will lead to additional improvements. Plan 1 ranks first for improving wildlife health. Plans 2 and 3 provide about equal benefits.

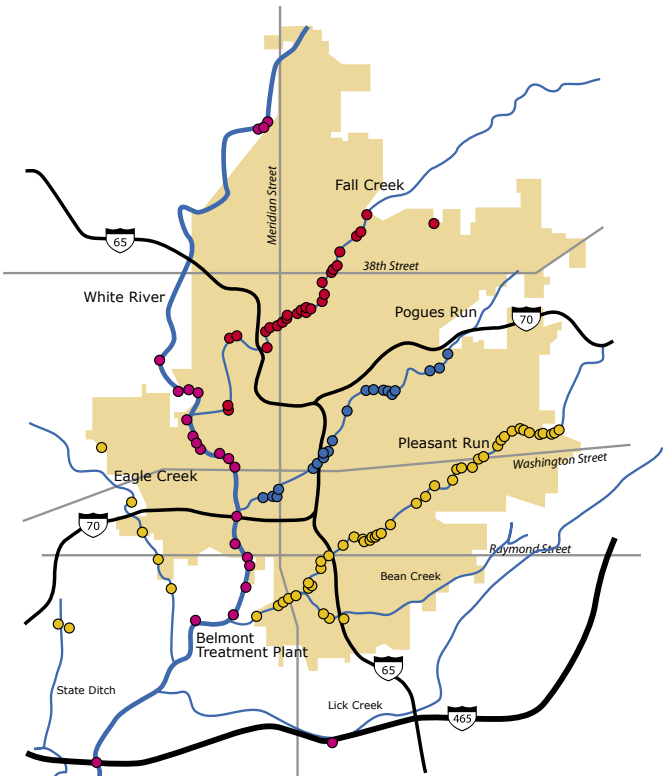
Managing Costs: The chart compares the plans based upon total cost, cost per gallon captured, and the impact on monthly sewer rates. Total costs include the cost of design, construction and operation over 20 years. The cost-per-gallon column shows that costs are similar for 90, 93 and 95 percent capture, but get more expensive when you have to build facilities big enough to capture the biggest storms. The monthly sewer rate is estimated based upon funds and financing needed for sewer overflow projects only.

***Please answer Question 2 on the Clean Stream Decision-Making Card.**

PRIORITY AREAS

The city has conducted surveys to determine how people use our streams. These surveys show that our streams and greenways are used for a variety of activities, with the most popular being walking, jogging, bicycling, and playing by the streambank. Less frequent activities include fishing, wading and swimming.

Recreational activities are reported both along smaller, neighborhood streams, and the White River. However, there are no swimming beaches along waterways affected by sewage. The city has concluded that while each waterway is important to people who live along and use it, no one waterway or area is more important than another to the entire city.



Location of sewage overflows in Indianapolis

ARE SMALLER STREAMS A HIGHER PRIORITY?

In implementing the plan, the city could spend more resources and place higher standards on some streams than others. What is your preference?

- ***All streams should be treated the same.*** The city should have the same goal for reducing overflows on all streams.
- ***Smaller streams should be a higher priority than White River.*** Smaller, neighborhood streams should be a higher priority because water quality impacts are more severe there. Also, reducing overflows on these streams will improve White River, because the smaller streams flow into White River.
- ***Some small streams should receive higher protection than other small streams.*** You may prefer a higher control on Fall Creek vs. Pleasant Run or Eagle Creek vs. Pogues Run. If so, please explain your reasoning.
- ***Some streams may receive a higher level of control because it is cost-effective to do so.***

HOW MUCH CONTROL MAY BE REQUIRED?

Because sewer overflow costs and impacts vary in each community, regulatory agencies may require more or less control in different communities or on different waterways. Some U.S. waterways have been allowed an average of 6 overflows per year, others 4, and others 2 or fewer. During negotiations, the U.S. Environmental Protection Agency has suggested we should evaluate additional levels of control, including different levels of control on the White River and the smaller streams. An example would be that we achieve an average of 3 overflows per year for White River, Pleasant Run and Eagle Creek, and 2 per year for Fall Creek and Pogues Run.

Here is how this particular option would compare with the options shown on page 10.

AVERAGE % OF FLOW CAPTURED AND TREATED ANNUALLY	AVERAGE # OF UNTREATED OVERFLOWS PER YEAR	ADDITIONAL GALLONS OF SEWAGE CAPTURED /TREATED PER YEAR	DAYS WATERWAYS ARE SAFE FOR SWIMMING (<235 E. COLI COLONIES/100 ML)	DAYS WATERWAYS HAVE VERY HIGH BACTERIA LEVELS (> 10,000 COLONIES/100 ML)	AQUATIC AND WILDLIFE BENEFITS	TOTAL COST (CONSTRUCTION + OPERATIONS FOR 20 YEARS)	TOTAL COST PER GALLON OF OVERFLOW CAPTURED	AVERAGE HOMEOWNER'S MONTHLY SEWER RATES (AT END OF 20 YEARS)
96%	3 OR 2	7.37 billion	230 days	3 OR 2 days	1ST	$2.05 BILLION	27.8 CENTS	$53-54

The city hasn't selected a level of control because we need your input first. What are your thoughts?

***Please answer Questions 3, 4 and 5 on the Clean Stream Decision-Making Card.**

WHAT YOU CAN DO

It took decades for our streams to get into this condition, and it will take years of hard work and investment to improve them. In the meantime, there are measures you can take to help protect the environment and yourself and your family.

PROTECT THE ENVIRONMENT

- Disconnect downspouts and sump pumps connected to sewers. This will prevent clear water from using up our sewers' capacity.
- Don't send fats, oils or grease down the drain. They cause sewer blockages and backups.
- Properly dispose of motor oil, antifreeze, battery acid and household chemicals. Call 327-4TOX to learn how.
- Clear gutters and storm sewer drains of leaves and debris.
- Reduce water use in your home and business.
- Clean up after your pets. Their waste contaminates our waterways.

PROTECT YOURSELF AND YOUR FAMILY

- Pay attention to warning signs posted by the Indianapolis Department of Public Works and the Marion County Health Department.
- Call the Sewer Overflow Hotline at 327-1643 to receive notification of sewage overflows.
- Sign up for sewage overflow e-mail alerts at www.indycleanstreams.org.

THE PROCESS

The City of Indianapolis has been working for years on its long-term control plan for the Indianapolis sewer system. The plan must be submitted to the U.S Environmental Protection Agency and the Indiana Department of Environmental Management. The following is a tentative schedule:

SCHEDULE

• Oct. 14-26	Public meetings
• November	Determine preferred plan
• December - January	Produce draft of long-term control report
• February	30-day public comment period
• Mid-February	Hold public hearing
• March	Incorporate changes from public comments
• Late March	Produce final report
• April	Send to EPA and IDEM for review and approval

INDIANAPOLIS
CLEAN STREAM TEAM

151 N. Delaware St., Suite 900
Indianapolis, IN 46204

Stream Line
City of Indianapolis / Department of Public Works / Clean Stream Program

INSIDE: YOUR CHANCE TO COMMENT ON OPTIONS FOR CONTROLLING SEWAGE OVERFLOWS.